

REMARKS

Claims 1 through 17 are pending in the application. Claims 1, 4, 7, 13, 16 and 17 are currently amended. Claim 6 is cancelled.

Claims 1 and 13 are amended to recite that the circuitry captures images of a primary calibration target and a nonstandard calibration target. A second image of the nonstandard calibration target is captured and related to at least one of the captured images from the primary calibration target and the nonstandard calibration target. White balance is achieved by relating this second image of the nonstandard calibration target to at least one of the captured image of the primary calibration target and the nonstandard calibration target. This permits the photographer, for example, to use his or her hand as a nonstandard calibration target to produce field capture data for use in achieving white balance as recited in claim 7. Support for these changes may be found in the Abstract, in paragraph 13 and in the discussion of Fig. 1 in the application as filed.

Claims 16 and 17 are amended to overcome the objection to these claims by making them depend from claim 13.

Claims 1, 6, 7 and 8-12 stand rejected under 35 U.S.C. §103(a) as being obvious over United States Patent No. 5,119,178 to Sakata et al. The rejection relies upon the discussion in column 3 at lines 25 to 57 to show what is claimed; however, that discussion shows only a technique for manually adjusting white balance by user-adjustment of potentiometers to match the color bars of captured images between a white standard target and a nonstandard target consisting of a lens cap with a color bar chart. The Sakata et al device fails to obtain field data of the nonstandard target and then to use this field data in adjusting white balance. Accordingly, it is quite difficult to calibrate the Sakata et al. camera by achieving true white balance under field illumination conditions, since this requires a manual adjustment of each color bar. Sakata et al. does not teach or suggest the solution to this problem by the use of field capture data as now claimed. Sakata teaches away from what is claimed by proposing a more difficult procedure to achieve white balance.

Claims 2 – 5 stand rejected under 35 U.S.C. §103(a) as being obvious in view of Sakata et al in combination with applicant's admitted prior art. Sakata et al. is applied as above. Applicant has admitted that CMOS capture devices are in the prior art; but not as is claimed. This combination does not overcome the deficiency of Sakata et al. where Sakata et al. does not teach or suggest the use of field capture data including the nonstandard target, for example, under illumination conditions that differ from those of the primary target and as first image of the nonstandard target. Claims 2-5 have patentable merit of their own, but are at least patentable for the reasons that claim 1 is patentable.

Claims 13, 16 and 17 stand rejected under 35 U.S.C. §103(a) as being obvious in view of Sakata et al. in combination with United States Patent Publication 200301112342 to Takeuchi. Sakata et al. is applied as above. Takeuchi is used to show a system that stores primary and secondary images to reduce a calculation burden when calculating white balance; however, the combination does not teach or suggest what is claimed. The combination of Sakata et al. with Takeuchi does not teach or suggest the use of field image capture data from the nonstandard target to achieve white balance by relating the field capture image data to at least one of the captured image signals for the primary target or the nonstandard target.

Claims 14 and 15 stand rejected under 35 U.S.C. §103(a) as being obvious in view of Sakata et al. in combination with United States Patent Publication 200301112342 to Takeuchi and applicant's admitted prior art. Sakata et al. and Takeuchi are applied as above. Applicant has admitted that CMOS devices are known in the art, but not as presently claimed. The combination does not teach or suggest the use of field image capture data from the nonstandard target to achieve white balance by relating the field capture image data to at least one of the captured image signals for the primary target or the nonstandard target.

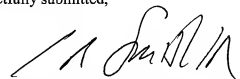
The undersigned respectfully solicits a Notice of Allowance because all of the remaining claims are patentable for the reasons explained above.

Docket No.: 1001110178-1

Applicant believes no fees are due in connection with this Response; however, if any fee is deemed necessary, the Examiner is authorized to charge such fee to Deposit Account No. 12-0600.

Respectfully submitted,

By:



Jerome R. Smith, Jr. Reg. No. 35684
LATHROP & GAGE L.C.
2345 Grand Boulevard, Suite 2400
Kansas City, Missouri 64108
Telephone: (816) 460-5306
Facsimile: (816) 292-2001